

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)  
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference G2475.Wo1294	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. PCT/B2004/003531	International filing date ( <i>day/month/year</i> ) 27.10.2004	Priority date ( <i>day/month/year</i> ) 31.10.2003	
International Patent Classification (IPC) or national classification and IPC A24D3/02			
Applicant G.D S.P.A.et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of 1 sheets, as follows:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</li> <li><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</li> </ul> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Box No. I Basis of the opinion</li> <li><input type="checkbox"/> Box No. II Priority</li> <li><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li><input type="checkbox"/> Box No. IV Lack of unity of invention</li> <li><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li><input checked="" type="checkbox"/> Box No. VI Certain documents cited</li> <li><input type="checkbox"/> Box No. VII Certain defects in the international application</li> <li><input type="checkbox"/> Box No. VIII Certain observations on the international application</li> </ul>			
Date of submission of the demand 01.08.2005	Date of completion of this report 27.02.2006		
Name and mailing address of the international examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Marzano Monterosso, Telephone No. +49 89 2399-2902		



**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/IB2004/003531

**Box No. I Basis of the report**

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
  - This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
    - international search (under Rules 12.3 and 23.1(b))
    - publication of the international application (under Rule 12.4)
    - international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

**Description, Pages**

1-11 as originally filed

**Claims, Numbers**

4(part), 5-17 as originally filed  
1-3, 4(part) received on 08.02.2006 with letter of 06.02.2006

**Drawings, Sheets**

1/5-5/5 as originally filed

- a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3.  The amendments have resulted in the cancellation of:
  - the description, pages
  - the claims, Nos.
  - the drawings, sheets/figs
  - the sequence listing (*specify*):
  - any table(s) related to sequence listing (*specify*):

4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- the description, pages
- the claims, Nos.
- the drawings, sheets/figs
- the sequence listing (*specify*):
- any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT  
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International application No.  
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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes:	Claims	1-17
	No:	Claims	
Inventive step (IS)	Yes:	Claims	1-17
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-17
	No:	Claims	

2. Citations and explanations (Rule 70.7):

**see separate sheet**

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**Box No. VI Certain documents cited**

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1. Certain published documents (Rule 70.10)

and / or

2. Non-written disclosures (Rule 70.9)

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.

PCT/IB2004/003531

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

Document DE 1258318 B (D1) is regarded as being the closest prior art to the subject-matter of claim 1, and shows (the references in parentheses applying to this document):

a device for feeding filter rods in a filter tip attachment machine comprising a take up roller presenting longitudinal flutes (9) each serving to take up and retain a respective filter rod (13), on which the rods are directable along a predetermined feed path through cross cutting means (19-22) and dividable transversely into plugs before being transferred to staggering means.

The subject-matter of claim 1 differs from this known apparatus in that the roller comprises means by which to adjust the axial position of the flutes.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as providing for a device for feeding filter rods which can be easily and rapidly adapted to different lengths of filter rods or plugs to be cut, without the need to substitute the whole roller.

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) because document D1 teaches away from the provision of axially moveable flutes. In fact the device disclosed in D1 provides for a single group of cutting means (see fig. 2) so that moving the flutes axially would have no sense.

Claims 2-17 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

**Re Item VI**

**Certain documents cited**

**Certain published documents**

Application No Patent No	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.  
**PCT/IB2004/003531**

**EP-1452100-A**

**01.09.2004**

**28.02.2003**

10/577838

IAP17 Rec'd PCT/PTO 01 MAY 2006

Claims

- 1) A device for feeding filter rods (2) in a filter tip attachment machine, comprising a take-up roller (5) presenting longitudinal flutes (7) each serving to take up and retain a respective filter rod (2), on which the rods (2) are ~~directed~~ directable along a predetermined feed path (P) through cross cuttings means (9) and ~~divided~~ dividable transversely into plugs (10) before being transferred to staggering means (13), characterized in that the roller (5) comprises means (40) by which to adjust the axial position of the flutes (7).  
10
- 2) A device as in claim 1, comprising at least two first modules (17) affording grooves (24, 25) presented by a central portion of each flute (7), adjustable between positions distanced from and breasted with one another through the agency of the adjustment means (40) in such a way as to create a first gap (58), when in the breasted position, afforded by each flute (7) and accommodating the passage of the cutting means (9).  
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20
- 3) A device as in claim 2, wherein each of the first modules (17) affords a second gap (59) accommodating the passage of the cutting means (9).
- 25 4) A device as in claim 2, comprising second modules (20) affording grooves (26, 27) presented by intermediate portions of each flute (7) and capable